Section B - Chapter 14 Neuse River Subbasin 03-04-14

Carteret and Pamlico Counties

14.1 Water Quality Overview

Subbasin 03-04-14 at a Glance

Land and Water Area

Total area: 336 mi²
Land area: 59 mi²
Water area: 277 mi²

Population Statistics

1990 Est. Pop.: 374 people Pop. Density: 1.1 persons/mi²

Land Cover (percent)

Forest/Wetland: 16.6 Surface Water: 81.0 Urban: 0.1 Cultivated Cropland: 1.4

Pasture/

Managed Herbaceous: 0.1

Municipalities

Goldsboro and Kinston

Counties

Carteret and Pamlico

There is very little land area in this subbasin and no large communities. There are 24,617 acres of managed public lands in this subbasin, mostly associated with the Cedar Island National Wildlife Refuge.

There are no NPDES wastewater discharge permits in this subbasin and no registered animal operations.

Data from three ambient monitoring stations were collected as part of the water quality assessment (Figure B-14 and Table B-40). Refer to 2001 Neuse River Basinwide Assessment Report at http://www.esb.enr.state.nc.us/bar.html and Section A, Chapter 3 for more information on monitoring.

DEH SS (page 52) has classified 73,101 acres as approved, 2,499 as conditionally approved-open, 373 acres as conditionally approved-closed and 3,422 acres as prohibited /restricted.

Use support ratings are summarized in Part 14.2 below. Recommendations, current status and future recommendations for waters that were impaired in 1998

are discussed in 14.3 below. Current status and future recommendations for newly impaired waters are discussed in 14.4 below. Supporting waters with noted water quality impacts are discussed in Part 14.5 below. Water quality issues related to the entire subbasin are discussed in Part 14.6. Unless otherwise noted, all discussions are for the aquatic life and secondary recreation use support category. Refer to Appendix III for a complete list of monitored waters by use support category and more information on supporting monitored waters.

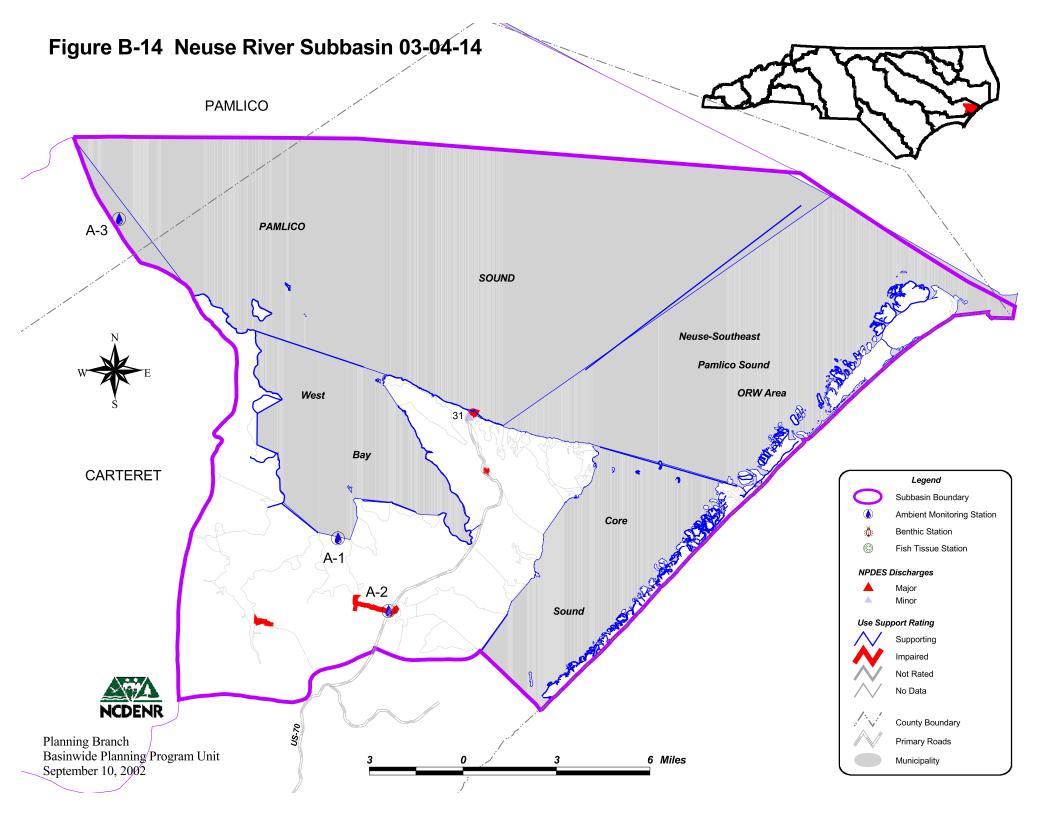


Table B-40 DWQ Monitoring Locations in Subbasin 03-04-14

Ambient Monitoring Sites									
Map #	Waterbody	County	Location	Station #	Noted Parameters ²				
A-1	Neuse River	Pamlico	Near Pamlico	J9930000	none				
A-2	West Thorofare River	Carteret	Channel Marker 10	J9938000	none				
A-3	Thorofare Canal	Carteret	NC 12	J9940000	none				

A =ambient monitoring station

14.2 Use Support Summary

Use support ratings (page 54) in subbasin 03-04-14 were assigned for aquatic life and secondary recreation, fish consumption, primary recreation and shellfish harvesting. Based on ambient water quality data and land use information, all monitored waters in this subbasin (171,419 ac) are supporting aquatic life and secondary recreation. All waters in the subbasin are considered impaired on an evaluated basis because of fish consumption advisories (page 93). Twenty-one coastline miles are supporting primary recreation based on DEH monitoring of swimming areas (page 52). Fifty-seven acres are impaired for the shellfish harvesting use support category. Use support ratings are summarized in Table B-41 for monitored waters in subbasin 03-04-14. Use support ratings for waters that were monitored and impaired in at least one use support category or were impaired in 1998 are presented in Table B-42.

Table B-41 Summary of Use Support Ratings by Use Support Category in Subbasin 03-04-14

Use Support Rating	Basis	Aquatic Life and Secondary Recreation	Fish Consumption	Primary Recreation	Shellfish Harvesting
Supporting	Monitored		0		
		171,418.8 ac		160,749.9 ac	171,361.7 ac
	All Waters		0		
		171,418.8 ac		160,749.9 ac	171,361.7 ac
Impaired	Monitored	0	0	0	
					57.1 ac
	All Waters	0		0	
			171,418.8 ac		57.1 ac
Not Rated	Monitored	0	0	0	0
No Data	N/A	0	0		0
				10,668.9 ac	
Total	Monitored		0		
		171,418.8 ac		160,749.9 ac	171,418.8 ac
	All Waters				
		171,418.8 ac	171,418.8 ac	171,418.8 ac	171,418.8 ac
	Percent Monitored		0%		100% ac
		100% ac		91% ac	

Note: All waters include monitored, evaluated and waters with no basis.

² Parameters are noted if in excess of state standards in greater than 10 percent of all samples.

^{* 21} miles of Atlantic coastline not included in table.

Table B-42 Previously or Currently Impaired Waters in Subbasin 03-04-14

Name	1998 Status	2002 Status	Use Support Category	mi/ac
Pamlico Sound	Impaired	Impaired	Shellfish Harvesting	12.5 ac
Golden Creek	Impaired	Impaired	Shellfish Harvesting	9.7 ac
Thorofare	Impaired	Impaired	Shellfish Harvesting	34.9 ac
			Total 2002 Impaired Acres	57.1

14.3 Status and Recommendations of Previously Impaired Waters

14.3.1 Impaired Class SA Waters

Portions of Class SA waters were partially supporting in the 1998 basin plan because they were classified as prohibited to shellfish harvesting by DEH SS (page 52). No specific recommendations were made to address bacterial contamination in these waters in the 1998 basin plan. Because of changes in use support methodology, there are changes in acreages and areas that are impaired in the shellfish harvesting use support category. These waters are discussed below in part 10.4.

14.4 Status and Recommendations of Waters Newly Impaired Waters

14.4.1 Small Areas in Pamlico Sound, Golden Creek and Thorofare

Current Status

These waters (57.1 acres) are currently impaired in the shellfish harvesting use support category because they are permanently closed to shellfish harvesting.

The Thorofare and Golden Creek are likely closed due to persistent bacterial contamination from abundant wildlife in the area, as there is little development in this subbasin.

This small portion of Pamlico Sound near Cedar Island Ferry Harbor is DEH SS classified as prohibited and permanently closed to shellfish harvesting. The area remains permanently closed to shellfish harvesting because of the presence of the marina facility. There are no noted septic system problems for businesses located adjacent to this area.

2002 Recommendations

DEH SS will continue to monitor bacteriological water quality in these waters. DWQ, DEH, DCM and DMF are currently developing tools to better track water quality changes, make use support decisions, and support research in shellfish harvesting waters of North Carolina (page 84).

14.5 Status and Recommendations for Waters with Noted Impacts

The surface waters discussed in this section are supporting designated uses (unless otherwise noted) based on DWQ's use support assessment and are not considered to be impaired. However, notable water quality problems and concerns have been documented for some waters based on this assessment. While these waters are not considered impaired, attention and resources should be focused on these waters to prevent additional degradation or facilitate water quality improvement.

Current Status and Recommendations

The Atlantic coastline in this subbasin is impaired fish consumption because of a consumption advisory for king mackerel (page 93). There are no communities on the Atlantic coastline in this subbasin; therefore, stormwater outfalls and pumping have not been impacting primary recreation as in other areas on the coast.

14.6 Additional Water Quality Issues Within Subbasin 03-04-14

This section discusses issues that may threaten water quality in the subbasin that are not specific to particular streams, lakes or reservoirs. The issues discussed may be related to waters near certain land use activities or within proximity to different pollution sources.

14.6.1 Impacts of Post-Hurricane De-Snagging on Instream Habitats

Many streams in the subbasin have noted impacts from the recent hurricanes. The biological community in the streams can recover rapidly if instream habitat is maintained. De-snagging operations should carefully remove debris from stream channels to restore natural flow and leave enough instream habitat so the biological community can recover.